

WHAT IS CLAIMED IS:

1. A test socket for testing electrical characteristics of a semiconductor device by connecting probes, arranged in a grid-like form, with outer
5 connecting terminals of the semiconductor device, arranged in a grid-like form, and electrically connecting the probes with the outer connecting terminals comprising:

a connecting sheet, made of an electrically
10 deformative insulating material, and having electrodes for electrically connecting the probes to the outer connecting terminals of the semiconductor device wherein a plurality of protrusions, formed into a smooth curved surface, and a plurality of recesses, formed into a
15 smooth curved surface and extending in the vicinity of the protrusions, are formed in the electrodes of the connecting sheet, being in contact with the outer connecting terminals of the semiconductor device.

2. The test socket according to claim 1,
20 wherein the electrodes of the connecting sheet are electrodes being in contact with probes, and electrodes being in contact with the outer connecting terminals of the semiconductor device, and

the two types of the electrodes are connected
25 through electrically connecting holes, formed in the elastically deformative insulating member and located on

a front surface and a back surface of the connecting sheet.

3. The test socket according to claim 1,
wherein a shape of tips of the probes, being in
5 contact with the electrodes of the connecting sheet, is
like a recess or a protrusion, and
the electrodes are shaped like a protrusion, which
can be engage with the probes of the recess-like shape
or a recess, which can be engaged with the probes of the
10 protrusion-like shape.

4. A test socket having a circuit board, which
transmits an electrical signal for testing electrical
characteristics of a semiconductor device to outer
connecting terminals of the semiconductor device,
15 arranged in a grid-like form, and receives the
electrical signal from the outer connecting terminals,
and transmits the electrical signal to a testing
equipment and receives the electrical signal from the
testing equipment, comprising:
20 a connecting sheet, made of an elastically
deformative insulating member and having electrodes for
electrically connecting the circuit board with the outer
connecting terminals of the semiconductor device wherein
a plurality of protrusions, formed into a smooth curved
25 surface, and a plurality of recesses, formed into a
smooth curved surface and extending in the vicinity of
the protrusions, are formed in the electrodes of the

connecting sheet, being in contact with the outer connecting terminals of the semiconductor device.

5. The test socket according to claim 4,
wherein the electrodes of the connecting sheet are
5 electrodes, being in contact with the circuit board, and
electrodes, being in contact with the outer connecting
terminals of the semiconductor device,
the two types of the electrodes are connected
through electrically connecting holes, formed in the
10 elastically deformative insulating member, and
connecting wires, and are located on a front surface and
a back surface of the connecting sheet, and
a distance between the electrodes, being in contact
with the circuit board, and a distance between the
15 electrodes, being in contact with the outer connecting
terminals of the semiconductor device, are different.

6. The test socket according to claim 1, further
comprising:
a guiding member having holes at positions
20 corresponding to the outer connecting terminals of the
semiconductor device and overlapping the connecting
sheet.

7. The test socket according to claim 4, further
comprising:

a guiding member having holes at positions corresponding to the outer connecting terminals of the semiconductor device and overlapping the connecting sheet.

5 8. The test socket according to claim 1,
 wherein the electrodes of the connecting sheet,
being in contact with the outer connecting terminals of
the semiconductor device, have a spaced portion and a
bending portion, and

10 the bending portion is in contact with the outer
connecting terminal of the semiconductor device.

 9. The test socket according to claim 4,
 wherein the electrodes of the connecting sheet,
being in contact with the outer connecting terminals of
15 the semiconductor device, have a spaced portion and a
bending portion, and

 the bending portion is in contact with the outer
connecting terminal of the semiconductor device.

 10. The test socket according to claim 1,
20 wherein a through hole is formed in a part of the
connecting sheet.

 11. The test socket according to claim 4,
 wherein a through hole is formed in a part of the
connecting sheet.

12. The connecting sheet included in the test socket according to claim 1.

13. The connecting sheet included in the test socket according to claim 2.

5 14. The connecting sheet included in the test socket according to claim 3.

15. The connecting sheet included in the test socket according to claim 4.

10 16. The connecting sheet included in the test socket according to claim 5.